



# **SE111-00**

## SET-TOP VIDEO POST FILTER

The SE111-00 is a surface mountable active hybrid module designed to interface a digital video encoder to  $75\Omega$  composite (CMPS), Luma (Y) and Chroma (C) outputs. Use of high performance operational amplifiers ensures minimal differential phase/gain errors and the ability to drive  $\pm$  2.5V into  $75\Omega$  loads.

#### Other features

- Drives two composite outputs and one Y/C output
- accurate factory set gain of 0 dB (6 dB optional order SE111-60)
- $75\Omega$  output termination resistors provided
- $\bullet$  sinx/x correction for 27 MHz sampling
- high input impedance makes interfacing easy
- DC coupling eliminates tilt problems associated with AC coupling
- DC offset of encoder output (due to single rail operation) is corrected to bring blanking level near zero
- 24-pin j-lead package

#### FILTER SPECIFICATION FOR EACH CHANNEL

End of Passband 6.0 MHz
Passband shape sinx/x
Sampling frequency 27 MHz

Amplitude ripple  $\pm 0.5 \text{ dB to } 6.0 \text{ MHz},$ 

Gain  $0 dB \pm 0.2 dB$ 

Group Delay ripple < 20 ns Start of stopband 21 MHz

Stopband rejection wrt 100 kHz > 40 dB (with  $\sin x/x$ ) Input impedance > 40 typical

Output impedance  $75\Omega$ Supply voltage  $\pm 5V$ 

Supply current 25 mA per rail (typical)

Package DR00144A

measured against  $\sin x/x$  predistortion curve

### PACKAGE DETAIL

